



# **Terminology trus(s)t**

**– structuring terminology as open data**

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# State- of-the-art and challenge

- many initiatives to make open data accessible, link data and facilitate for developers to use data (e.g. öppnadata.se).
- challenge: make different worlds work together, need for a truss.

# Project for linked open terminology data – *Fackverket 3.0*



# Fackverket ("Truss") 3.0

Describe how terminology can be published in a semantic way, and publish a few sources.

→ facilitate access to important definitions which are up-to-date and consensus-based.

In the long run, searches and statistics management are possible between authorities and organizations, and the authorities will have bigger possibilities to "speak the same language" and use definitions in their automatic exchanges.

# Project aims

- to radically enhance the use of existing terminologies from e.g. Swedish authorities by “semantifying” them (turning them into linked open data (LOD)) →
- to make it easier for application developers to use them

# LOD ...

## **linked data**

a pattern for hyperlinking machine-readable data sets to each other using Semantic Web techniques, especially via the use of RDF and URIs

## **linked open data (LOD)**

linked data published on the public Web and licensed under one of several open licenses permitting reuse

Publishing Linked Open Data enables distributed SPARQL queries of the data sets and a "browsing" or "discovery" approach to finding information, as compared to a search strategy.

[W3C, Linked Data Glossary]

# Terminological authority & trust ...

## **authority file**

list or file of headings to be used in an index, e.g. forms of proper names, subject headings [ISO 999:1996]

# Project steps and goals

- step 1: investigation of existing other projects and solutions, investigation of possible technical framework (discussions with W3C), developing use cases, investigation of metaterminology in Swedish → report, plans for steps 2 and 3
- step 2: deepened analysis → radically improved possibilities to use “semantified” (linked open) terminological data through coordination and development of existing resources
- step 3: realization → several of Sweden’s authorities and organizations have joint, open, linked, terminological resources.



# Use cases

- Termbank from National Board for Health and Welfare
- TNC 104 (*Basord i våra fackspråk*) a defining vocabulary
- Utrikes namnbok (a publication from Ministry for Foreign Affairs, containing names, titles and geographical names in several languages).

# Use case 1

- Termbank from National Board for Health and Welfare
- national responsibility for terminology
- monolingual
- downloadable in TBX-XML



<b>Term:</b>	<b>funktionsnedsättning</b>
<b>Termstatus:</b>	rekommenderad
<b>Synonymer:</b>	funktionshinder handikapp
<b>Definition:</b>	nedsättning av fysisk, psykisk eller intellektuell funktionsförmåga
<b>Beslutad:</b>	Senast beslutad 2007
<b>Anmärkning:</b>	En funktionsnedsättning kan uppstå till följd av sjukdom eller annat tillstånd eller till följd av en medfödd eller förvärvad skada. Sådana sjukdomar, tillstånd eller skador kan vara av bestående eller av övergående natur.
<b>Jämför:</b>	<a href="#">funktionshinder</a>
<b>Ämnesområde:</b>	Vård och omsorg

## Use case 2

- TNC 104 (*Basord i våra fackspråk*)
- monolingual defining vocabulary from TNC (no © issues)
- general concepts, usable in definition writing
- recent, structured



# Example

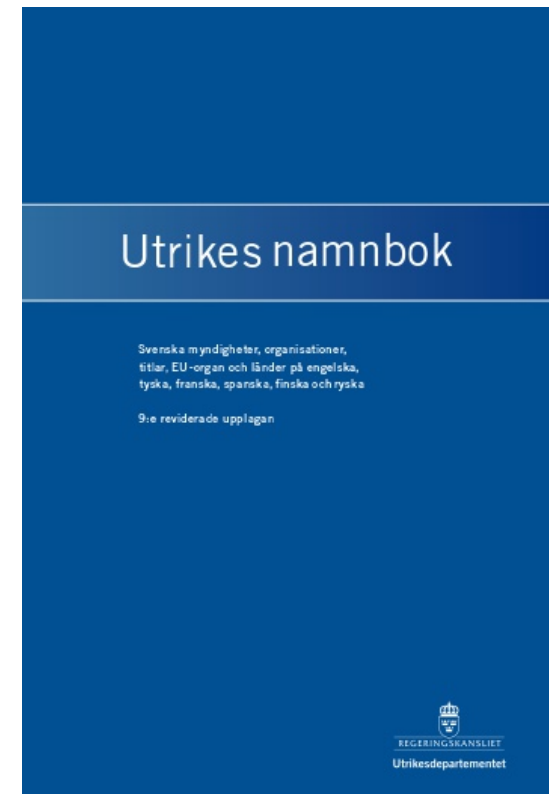
term: **fällning<sub>1</sub>**  
synonym: **utfällning**  
definition: (inom kemi:) process där ett ämne<sub>1</sub> skiljs ut ur en lösning genom att fasta partiklar bildas  
jämför: *flockning, sedimentation*  
kommentar: Verbformen av fällning är *fälla (ut)*.

Termen *fällning* kan även avse den substans som bildas av de fasta partiklar som skiljs ut.

Om fällningen sker på grund av en kemisk reaktion kan man tala om *kemisk fällning*.

## Use case 3 (later)

- Utrikes namnbok (a publication from Ministry for Foreign Affairs, containing names, titles and geographical names in several languages)
- already authority file in practice
- unstructured content
- constant updating needed



# Use case 3 (later)

## **arrendenämnd**

regional tenancies tribunal  
Regionales Pachteinigungsamt (n)  
commission (f) régionale d'arbitrage des baux  
à ferme  
comisión (f) regional de arbitraje de arriendos  
rústicos  
maanvuokralautakunta  
региональный согласительный комитет по  
вопросам аренды недвижимости

## **Barnombudsmannen (BO)**

Ombudsman for Children in Sweden  
Kanzlei (f) des Kinderombudsmannes  
Services (mpl) du médiateur (de la médiatrice)  
des enfants  
Ombudsman de Menores  
Lapsiasiamiehen virasto  
Уполномоченный по защите прав детей

## **Bolagsverket**

Swedish Companies Registration Office  
Schwedisches Firmenregistrierungsamt  
Office (m) suédois d'enregistrement des  
sociétés  
Oficina (f) de Registro Empresarial de Suecia  
Ruotsin yhtiövirasto  
Шведская служба регистрации предприятий

## **Monaco; Furstendömet Monaco; MC; monegask; monegaskisk**

Monaco; the Principality of Monaco; Monegasque; Monegasque  
Monaco; das Fürstentum Monaco; Monegasse; monegassisch  
Monaco; la Principauté de Monaco; Monégasque; monégasque  
Mónaco; el Principado de Mónaco; monegasco; monegasco  
Monaco; Monacon ruhtinaskunta; monacolainen; monacolainen  
Монако; Княжество Монако; монакец, монегаск; монакский

## **Mongoliet; MN; mongol; mongolisk**

Mongolia; Mongolian; Mongolian  
die Mongolei; Mongole; mongolisch  
la Mongolie; Mongol; mongol  
Mongolia; mongol; mongol  
Mongolia; mongolialainen; mongolialainen  
Монголия; монгол; монгольский

## **Montenegro; ME; montenegrin; montenegrinsk**

Montenegro; Montenegrin; Montenegrin  
Montenegro; Montenegriner; montenegrinisch  
Monténégro; Monténégryn; monténégryn  
Montenegro; montenegrino; montenegrino  
Montenegro; montenegrolainen; montenegrolainen  
Черногория; черногорец; черногорский

# Participants and funding

- The project is funded by Sweden's innovation agency (Vinnova), and its programme challenge-driven innovation
- Three partners
  - Bobitek AB
  - Terminologikum TNC (Swedish Centre for Terminology)
  - Wikimedia Sverige



Bobitek AB





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